



MAINE DEPARTMENT OF

Professional & Financial Regulation

**A Report to the Joint Standing Committee on
Insurance and Financial Services of the
122nd Maine Legislature**

Medical Malpractice Insurance in Maine

**Submitted by the Bureau of Insurance,
Department of Professional and Financial Regulation
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Executive Summary

In 2003, the Legislature enacted the Dirigo Health Act (P.L. 2003, c. 469), which required the Superintendent of Insurance to submit to the Legislature a report regarding medical malpractice lawsuits in Maine, the cost and availability of medical malpractice insurance, and the impact on the cost of such insurance of a cap on non-economic damages of \$250,000. Significant findings of this report include:

- Maine's current premium rates are generally less than half of the national average and among the 10 lowest states in the nation.
- Maine's medical malpractice insurance market is extremely concentrated, suggesting a lack of competition and a potential lack of coverage availability for healthcare providers, however stakeholders interviewed for the report did not view this market concentration as a major problem.
- Neither Maine's level of annual rate changes nor the estimated severity trends of Medical Mutual Insurance Company of Maine (MMIC) in the last several years exhibit the pattern of dramatic inflation shown in other states.
- Nationwide loss and defense expense to premium ratios increased from 80% in the early 1990s to over 120% in 2001- 2002. Maine's five year average of 90% of premium is significantly lower than the national average of 113%.
- A \$250,000 cap on non-economic damages could reduce expected loss and allocated loss adjustment expense by 15%-22%. A non-economic damage cap of \$350,000 could produce reductions of 12%-17%, while a \$500,000 cap has estimated reductions of 8%-12%.
- Effectively implemented "I'm sorry" programs are estimated to generate a 3.5% - 5.9% savings in total claim costs and potentially an increase in actual indemnity payments received by patients after attorney fees.

I. Purpose of the Report

Medical professional liability insurance encompasses policies issued to a wide range of medical professionals such as physicians, dentists, nurses, therapists, optometrists, and emergency medical technicians. Medical professional liability insurance also encompasses professional liability policies for medical organizations, such as hospitals, clinics, nursing homes, laboratories, managed care organizations, and visiting nurses associations. Professional liability insurance for physicians – commonly known as “medical malpractice insurance” – is the best known type of medical professional liability insurance.¹

In 2003, the Legislature enacted “An Act To Provide Affordable Health Insurance to Small Businesses and Individuals and To Control Health Care Costs”, better known as the “Dirigo Health Reform Act” (P.L. 2003, c. 469). Section E-22 of the Act required the Superintendent of Insurance to submit to the joint standing committee of the Legislature having jurisdiction over insurance and financial services matters a report regarding medical malpractice lawsuits, damage awards for non-economic damages in those lawsuits, and the cost and availability of medical malpractice insurance in Maine. The report must also address the impact on the cost of malpractice insurance of a cap on non-economic damages of \$250,000 in malpractice lawsuits.

In developing this report, the Bureau engaged Pinnacle Actuarial Resources, Inc. as consultants to the Bureau. Pinnacle analyzed existing Maine medical malpractice claims, assessed the potential impact of possible reforms, surveyed existing literature on the impact of these potential reforms, and provided a comprehensive assessment of how Maine’s medical malpractice system compares to the system in other states. As required by the statute, Bureau staff and Pinnacle consulted with representatives of the medical community, legal community and medical malpractice insurance industry regarding these issues.

¹ Commercial Liability Risk Management and Insurance, 5th Edition, 2002, American Institute for Chartered Property and Casualty Underwriters/Insurance Institute of America, p 9.11

II. Background: Filing a Medical Malpractice Claim in Maine

The law that physicians can be held liable under negligence principles for injuries to patients is well established.² In order for a physician to be considered negligent in a medical professional liability case, four elements must be present:

- A duty owed by the physician to a patient;
- A breach of that duty by the physician;
- An injury suffered by the patient; and
- Proof that the patient’s injury was proximately caused by the physician’s breach of duty.³

A. Statute of Limitations

The period for filing a medical malpractice claim in Maine is three years from the date the claim arose or, if it is a “foreign object” case, from when the plaintiff either discovered or should have discovered the harm. In the case of a minor, the period is the shorter of three years from maturity or six years after the claim arose. (24 M.R.S.A. § 2902.)

B. Mandatory Prelitigation Screening Panel System

Maine’s Health Security Act (24 M.R.S.A. §§ 2851 et seq.) requires prelitigation screening panel review of all medical liability claims. The purpose is to encourage the early resolution of claims that have merit and the withdrawal of those that do not.

Each panel consists of three members: a retired judge or someone experienced in conducting hearings, an attorney and a health care professional who preferably practices in the medical area at issue. In cases with more than one defendant, there may be a fourth panel member who practices in the medical area at issue.

² Ibid, p 9.11

³ Ibid, p 9.11

The parties may agree in writing to submit the claim to a binding decision of the panel. The parties may also ask the panel to hear certain issues and the Superior Court to hear others. The panel may request that dispositive legal issues be tried in the court prior to the panel hearing.

Three weeks before the hearing, the panel chairperson will hold a scheduling conference with counsel. This conference identifies witnesses, testimony, exhibits, time needed for the hearing, issues, and motions.

At least seven days before the hearing, each party submits panel briefs. These contain statements of the claim or defense, medical records expected to be used at the hearing, relevant depositions, and other exhibits discussed at the pre-hearing conference.

Each party has a chance to present its claims and defenses at panel hearings. The formal rules of evidence do not apply; wide latitude is allowed. As in administrative hearings, the panel will admit evidence which “is the kind of evidence upon which reasonable persons are accustomed to rely in the conduct of serious affairs.” (24 M.R.S.A. § 2854.)

The panel must decide, by a preponderance of the evidence, whether the defendant’s conduct deviated from the applicable standard of care, whether such conduct proximately caused the plaintiff’s injury, and whether the patient’s negligence, if any, equaled or exceeded that of the defendant.

The panel’s findings and any disclosures made at the hearing are confidential. They cannot be used in subsequent litigation unless the decision unanimously favors one party.

If the panel unanimously finds that the defendant negligently caused the plaintiff’s injury, the defendant must promptly enter into negotiations to pay the claim or admit liability. If the defendant admits liability, the parties may ask the panel to determine damages. If the panel unanimously finds the defendant did not negligently cause the plaintiff’s injury, the plaintiff must release the claim without payment. If either

party elects to go forward to trial, the unanimous findings may be admitted against that party.

C. Damages

Damages typically consist of economic losses -- such as medical bills and lost income -- and non-economic losses -- generally known as pain and suffering or, in the case of a family member, loss of companionship.

As panel findings are confidential, the court system does not keep track of award amounts or their components. The panel system therefore offers no empirical evidence upon which one can base a cap on non-economic loss. A number of other states have similar screening systems, but it is not clear whether their systems track awards or their components.

Maine does not limit non-economic damages except in wrongful death claims, where the limit is \$400,000, with a cap of \$75,000 on punitive damages. (18-A M.R.S.A. § 2804.)

D. Stakeholder Perceptions of the Current System

Among stakeholders interviewed for this report⁴, the general perception is that the medical malpractice system is working reasonably well in Maine. However, some stakeholders expressed concern about a perceived deterioration in the effectiveness of previous tort reforms, i.e., attorney fee caps, wrongful death damage caps and -- most importantly -- prelitigation screening panels. This concern was based on recent lawsuits that overruled panel decisions with large damage awards. Stakeholders pointed to William and Janet Gafner o/b/o Shannon Gafner v. Sammis, M.D., CV 96-51 (Washington County) in which a newborn received a shoulder injury as a result of the family physician not consulting with the OB/GYN during delivery, and a jury returned a verdict of \$850,000. They also pointed to Estate of Joan Healey v. Alan Hymanson, M.D., CV-00-230 (York County) involving intracranial bleeding following the

⁴ The stakeholder organizations interviewed are listed in Appendix 1.

administration of clot-breaking medication ultimately resulting in the patient's death. The jury award in the Healey matter was \$1,662,846. Some parties felt that the specifics of these cases may have contributed to the large awards.

Opinions on the benefits and shortcomings of the panels were diverse and strongly held. These same strong opinions fell along similar lines when the topic of caps on non-economic damages was raised.

According to stakeholders, the rural medical malpractice insurance subsidy program appears to be working reasonably well and addresses the most fragile aspect of the system. The Rural Medical Access Program provides financial assistance of \$5,000 to \$10,000 per year to doctors providing obstetrical and prenatal care in underserved areas of the state. The program is funded by assessments on physicians and hospitals. For most physicians and hospitals the assessment is included in the medical liability premiums paid, but physicians and hospitals that are self-insured are assessed by the Bureau of Insurance. Decisions to work in rural areas are perceived to be more of a lifestyle choice than an economic one.

III. The Market Environment

A. Market Concentration

An important measure of the availability of insurance coverage is the degree of competition, measured by the level of market concentration. Maine's marketplace, which ranks 35th in total premium volume, is much more concentrated than most states. Only three states are more concentrated: Alabama, South Dakota, and Washington, D.C.

Since 1997, over 40% of the nationwide medical malpractice insurance companies have been liquidated, voluntarily exited the market, or have been seriously downgraded by A.M. Best Company. Several of the companies interviewed in a Bureau study conducted by Milliman & Robertson, Inc. conducted four years ago on the impact of collateral source payment reforms are either gone from the medical malpractice market

or impaired (St. Paul, PHICO, OHIC, HUM, Princeton, and Virginia Insurance Reciprocal).

While many of the stakeholders interviewed reported less competition today in Maine's medical malpractice insurance market, particularly with the loss of St. Paul and PHICO, they did not view this as a major problem. Possible reasons included Medical Mutual Insurance Company of Maine (MMIC)'s high level of customer retentions (in the mid-90% range), a high level of physician loyalty to MMIC and the size of the insurance market. While the introduction of more competitors to this market might reduce premiums, some stakeholders remembered the destructive price competition brought about by PHICO and others. [See Table 1 for Premium Distribution by Carrier]

Table 1: Medical Malpractice Written Premium in Maine (1999 – 2003)

	1999	2000	2001	2002	2003
<i>Ace American Ins Co</i>	10,172		44,269	64,255	90,997
<i>Ace Fire Underwriters Ins Co</i>	27,457	38,644			
<i>American Alternative Ins Corp</i>	856	1,568	5,563	4,942	4,503
<i>American Casualty Co Of Reading PA</i>	445,752	460,659	469,064	505,536	591,659
<i>American Continental Ins Co</i>	63,914	30,086	19,909		
<i>Chicago Ins Co</i>	299,645	297,860	339,165	323,310	395,789
<i>Church Mutual Ins Co</i>			181	690	856
<i>Cincinnati Ins Co</i>	164	328	246	186	175
<i>Connecticut Indemnity Co</i>	16,289	13,968	16,284	15,714	17,270
<i>Continental Casualty Co</i>	541,983	526,670	566,334	626,629	637,415
<i>Continental Ins Co</i>	4,615				
<i>Doctors Co An Interins Exchange</i>	782,845	754,012	738,670	1,151,965	1,219,739
<i>Executive Risk Indemnity Ins</i>			16,856	4,816,690	332,4189
<i>Fireman's Fund Ins Co</i>	822		14,468	43,819	4,196
<i>Frontier Ins Co</i>	72,240	39,761	6,799		
<i>General Ins Co Of America</i>			1,631		
<i>Granite State Ins Co</i>	37,476	41,776	44,996	50,545	70,738
<i>Gulf Ins Co</i>	29,712	53,312	30,055	42,299	36,575
<i>Insurance Co Of The State Of PA</i>	75	75			
<i>Jefferson Ins Co</i>	2,373	2,676			
<i>Kemper Casualty Ins Co</i>			44	71	
<i>Legion Ins Co</i>	128,913	306,295	240,284		
<i>Medical Liability Mut Ins Co</i>			332,876	240,514	36,360
<i>Medical Mut Ins Co Of ME</i>	13,470,808	14,345,156	20,788,858	23,848,816	27,318,867
<i>Medical Protective Co</i>		36,537	156,864	169,319	253,124
<i>National Fire Ins Co Of Hartford</i>	31,514	335,610	7,305		
<i>National Union Fire Ins Co Of Pitts</i>	79	79	237	152,194	246,127
<i>NCMIC Ins Co</i>	215,665	191,949	192,501	208,093	219,980
<i>Proselect Ins Co</i>	2,179	585,423	1,854,273	3,524,593	3,759,728
<i>St Paul Fire & Marine Ins</i>	3,766,794	3,664,135	4,279,126	672,018	26,641
<i>St Paul Mercury Ins Co</i>	257,845	128,585	70,345	55,874	
<i>TIG Ins Co</i>			55,577	97,916	25,655
<i>Westport Ins Corp</i>		3,331		450	2,332
<i>Zurich American Ins Co</i>					
	22,306,980	23,489,080	30,294,780	36,621,267	38,820,166

B. Premium Rates

A nationwide study of three key physician specialties (internists, general surgeons, OB/GYNs) using a leading medical malpractice carrier demonstrates that Maine's current premium rates are less than half of the national averages and among the ten lowest states in the nation.

Maine's average annual rate change of about 3% is among the lowest in the nation. Maine does not exhibit the 15%-70% annual inflation of the crisis states. The 3% annual rate change is also in line with the annual severity trend of 4.3% from 1992-2003 included in Tillinghast Towers Perrin's actuarial report supporting MMIC's latest rate filing. This 4.3% trend assumption is lower than the severity trends shown in prior years.

C. Industry Loss Experience

By analyzing loss and defense costs trends between states and by line of business, comparisons can be made regarding the volatility in medical malpractice insurance. All insurance lines exhibit cyclical behavior in their loss ratios. However, none demonstrate a magnitude of swings approaching medical malpractice. The worst loss ratios for medical malpractice are also significantly higher than the worst ratios for the other lines.

A comparison of the entire medical malpractice industry, MMIC, and ProMutual Group shows a general downward trend in claim frequencies per dollar of premium, particularly in the last few years. This is not surprising given the significant rate increases some insurers have implemented during this period. More interestingly, claim severities for the industry appear to have leveled off in the most recent years. This is also supported by MMIC's most recent rate filing.

In the last five years, most states have seen a dramatic increase in the ratios of loss or loss plus Defense and Cost Containment (DACC) to earned premium. Nationwide loss and DACC ratios increased from around 80% of premium in the early 1990s to at least 120% in 2001 and 2002. The majority of this increase has been due to more losses being paid to claimants without paying significantly more (as a percentage of premiums)

for defense costs. Maine's five year average of 90% is much lower than the national average of 113%. The loss and DACC ratio in Maine has exceeded 100% only once during the period.

Adverse loss reserve development has affected medical malpractice insurers across the nation in recent years. Liabilities that have occurred but not been settled are subject to potential errors of estimation since they will depend on the outcome of events yet to occur, e.g., jury decisions and attitudes of claimants regarding settlements. The industry enjoyed an extended period of favorable loss development from initial expectations from 1985 to 1995; initial held reserves were annually overstated by over \$1 billion for nine consecutive years. This trend has dramatically reversed itself over the last six years; each year has shown significant reserve shortfalls. The magnitude of these shortfalls is alarming because of the very real possibility that the more current estimates may not have fully corrected for the adverse development. In fact, many large medical malpractice insurers have had to add to loss reserves for prior accident years in the last five years. In many cases, these additions have exceeded 15% of total held reserves (considered an industry benchmark for "exceptional" loss development). The total adverse development exceeded 15% and \$1 billion in both 2000 and 2001. Total reserve additions for the period exceeded \$3.3 billion.

D. Industry Efficiency and Effectiveness

The level of underwriting expenses (i.e., the costs of marketing, acquisition, underwriting and overhead) is one aspect of an insurer's operational efficiency. A steady reduction in underwriting expense ratios has occurred both in Maine and nationwide over the last five years. This phenomenon is not uncommon when rates are increasing allowing fixed expenses to be spread over greater premiums, or when an insurance line is "belt-tightening" due to deteriorating loss experience.

One of the most common methods for measuring insurance effectiveness is operating ratios. Two ratios are most common:

- (1) the combined operating ratio which compares all loss, Defense and Cost Containment (DACC) expenses and underwriting expenses to premiums, and
- (2) the net operating ratio, i.e., the combined ratio reduced by investment income from insurance operations as a percentage of premiums.

Nationwide combined ratios increased from 103% in 1997 to over 155% in 2001. However, the combined ratios have dropped in the last two years, most likely reacting to significant rate increases. Maine's 2002-2003 results are significantly better than the nationwide experience.

Nationally, medical malpractice insurers' net operating ratios fluctuate much more widely than other lines of insurance, from about 65% of premium to over 130% in the last few years. Also, the investment income from insurance operations (the difference between the combined operating ratio and the net operating ratio) has decreased from over 30% of premium in the early to mid-1990s to about 15% of premium today. The industry has been losing money for the last five years.

Another way to view the effectiveness of an insurance mechanism is how much of the total industry's cash outflows are given to claimants; the higher this percentage, the more efficient it is considered. By this measure, the medical malpractice insurance mechanism is much less efficient than workers' compensation, private passenger auto and group health insurance. While approximately 52% to 78% of outflows go to claimants in the other lines, nationwide less than 40% of medical malpractice insurance payments are received by the claimants. Maine does better than the national average with claimants receiving about 48% of payouts. Part of Maine's greater efficiency is due to the claims process involving a lower percentage of defense attorney costs, and the sliding scale limits on attorney contingency fees controlling the plaintiffs' attorney costs.

E. Reinsurance and Investment Issues

Net investment income earned in the medical malpractice industry has dropped from 7% to 4% of invested assets over the last 16 years. Total net investment gain, including realized capital gains, has dropped from over 8% to under 5%. This has reduced investment income from operations from over 30% of premium to less than 15%. While the dramatic changes in unrealized gains do not affect statutory income, they do impact the valuation of assets, surplus and capitalization. Therefore, the unrealized losses of 2000-2002 did impact overall market capitalization.

Industry investment in stocks increased from about 15% in the early 1990s to almost 25% in 1999. Both MMIC and ProMutual also increased their holdings in equities. Part of this increase was due to the unrealized capital gains insurers realized in the 1990s, but the high returns on equities during the period also influenced asset investment decisions. In the last four years, the level of industry investment in equities has settled back to about 17%.

Overall capitalization, the amount of capital or equity that supports each dollar of premium, is a key measure of the relative strength of the insurance market. The more surplus there is supporting each dollar of premium, the more protection exists against adverse events, however that increased surplus can also put pressure on an insurer to increase income or risk diluting earnings if income is unchanged. The premium to surplus ratio for the industry steadily declined through most of the 1980s and 1990s. Only since 1998 has the industry capitalization seen more premium per dollar of surplus. Factors contributing to this trend include:

- Deteriorating workers compensation and medical malpractice results;
- Adverse developments on industry loss reserves from previous years for such coverages as workers' compensation, medical malpractice, asbestos, environmental, mold, and construction defect losses; and
- Adverse reinsurance results.

Finally, the impact of reinsurance costs on the affordability of medical malpractice premiums was considered. However, as changes in the dollars a company pays for reinsurance can be reflective of not only changes in pricing imposed by the reinsurer but also of changes in coverage purchased by the insurer, it is extremely difficult to separate the changes using publicly available data. No significant findings emerged.

F. Statutory and Regulatory Factors

States with damage caps have average premium rates 14-20% lower than states without caps. Average loss ratios are also 20 points lower in states with caps. States with patient compensation funds also show lower premium levels and lower loss ratios (about 15 points).

The approach to regulating medical malpractice rates does not appear to significantly influence average premium levels or loss ratios.

G. Physician Demographics

Federal Bureau of Labor Statistics data on average salaries for internists, general surgeons, and OB/GYNs demonstrates that while the premiums in Maine are well below national averages for all three specialties, physician salaries for two of the specialties are above national norms. Many of the states identified as being in crisis by the American Medical Association (CT, FL, IL, MA, NV, NJ, OH, PA, TX, WA, WV, WY) have ratios of premium to salary that are well above the national averages.

Average healthcare providers' wages in Maine (\$54,710) are slightly lower than those of Massachusetts (\$58,390) and New Hampshire (\$55,810) but exceed the national average (\$53,986). Comparatively, Maine's per capita income (\$29,093) is well below both neighboring states (MA-\$39,085, NH-\$33,984) and the national average (\$30,906).

While the number of Maine healthcare practitioners per capita is above the national average, so are the Medicare/Medicaid expenditures on both a per capita basis and as a percentage of total health care costs. Total Medicare reimbursements per enrollee are lower than national averages, but not out of line with the reimbursement levels in benchmark states such as North Dakota, Vermont, West Virginia, and Wyoming.

Some of the stakeholders interviewed for this report expressed concern with reduced patient access to OB/GYNs and neurosurgeons. Provider shortages were perceived as more of a Medicare/Medicaid reimbursement rate issue or due to other specific non-malpractice related issues. Several parties expressed concern that Maine has the “lowest Medicare reimbursement rate in the country, and Medicaid is even lower.” Besides Medicare/Medicaid cost drivers, prescription drug costs, a generally “older, sicker population” and the regulation of health insurance which has resulted in only four group health carriers (Harvard, Anthem, CIGNA, and Aetna) were identified as economic drivers. One interviewee described the Maine healthcare market as “fragile” due to the size of the market and geographic location. As a result, he suggested that the medical malpractice environment in Maine needs to be a plus, not just a break-even issue when recruiting providers to practice in Maine.

The State Board of Licensure in Medicine conducts mandatory review of physicians with three claims in 10 years as well as additional judgmental reviews at its discretion when the case’s specifics merit such a review. Unfortunately, the Board was unable to produce any statistics on the number or outcomes of these reviews over the last 10 years. Certain stakeholders interviewed stated that this data should be compiled and summary statistics that do not divulge individual information should be made publicly available.

IV. Claims Study

A. Claims Disposition

The Maine Claims Database demonstrates the following with regards to claims disposition for report years 1994 – 2004:

- *Claims with no prelitigation review or lawsuit* – In the 10 years, 869 claims were disposed of without a prelitigation review or lawsuit. While a variety of reasons exist for this disposition, three significant categories arise: dismissal (32%), settlement (29%), and withdrawal/abandonment (30%).
- *Claims with a prelitigation review but no lawsuit* – The 36 claims which fell into this category exhibited a similar distribution of reasons for disposition. However, these claims show a lower propensity to be withdrawn or abandoned (only 22%).
- *Claims with a lawsuit but no judgment or verdict* – 903 claims fell into this category; 37% were dismissed, 26% were settled, and 13% were withdrawn or abandoned.
- *Claims with a lawsuit and trial* – Of the 46 claims that went to trial, almost three-quarters of the verdicts were in favor of defendants.

B. Costs

A review of the costs associated with the 1994-2004 claims in the Maine Claims Database shows the following:

- *Average settlements* – The 10-year average settlement with no filed lawsuit or prelitigation review was \$233,600; in 2004, this average settlement was \$53,000. The 10-year average settlement with a prelitigation review but no filed lawsuit was \$192,500; in 2004, this average settlement was \$135,000. The 10-year average settlement with a filed lawsuit settled before the verdict was \$297,858; in 2004, this average settlement was \$87,500. The 10-year average award for claims with a verdict for the plaintiff was \$423,035 (there were no 2004 claims in this category). Claims that settled without a lawsuit or prelitigation review have settled at higher amounts than those claims that were

settled without a lawsuit and with a prelitigation review. Claims where a lawsuit was filed have higher average settlement values.

- *Average defense costs* – The 10-year average Defense and Cost Containment (DACC) expense for claims with a settlement but no filed lawsuit or prelitigation review was \$25,083; in 2004, the average cost was \$6,097. The 10-year average DACC for claims with a prelitigation review and settlement but no filed lawsuit was \$31,497; in 2004, the average cost was \$75,000. The 10-year average DACC for claims with a filed lawsuit settled before the verdict was \$35,435; in 2004, the average cost was \$12,063. The 10-year average DACC for lawsuits in which the verdict favored the plaintiff was \$88,963 (there were no 2004 claims in this category). The 10-year average DACC for lawsuits in which the verdict favored the defendant was \$67,628 (there were no 2004 claims in this category).

C. Claim Settlement Costs

The 1994-2004 claims reviewed in the Maine Claims Database exhibit the following with regards to claim settlement costs:

- *Size of loss* – The total 10-year loss was approximately \$164.6 million. Over 81% was loss; Defense and Cost Containment (DACC) expense accounted for 18%. The split between loss and DACC changes significantly as the size of loss increases; it is not unusual for the percentage of DACC to decrease as the size of a liability loss increases.
- *Loss distribution* -- Of the 2,792 closed cases, 1,152 (over 41%) had claims of \$1-\$5,000; an additional 575 (21%) had no value claims. Only 38 cases (less than 1.5%) involved claims of \$1 million or more. There is no shift to larger claims in recent years.
- *Larger claims by medical specialty* -- Claims in excess of \$500,000 account for 3.26% of the total number of closed claims in the 10-year period. Of these, hospital claims account for nearly 17%; corporate liability accounts for another 8%. Of the remaining 75%, OB/GYN claims account for approximately 14% and internal medicine claims account for about 8.5%. Of

the 13 larger Ob/Gyn claims, five of the claims alleged a failure or delay in diagnosis (including three associated with the diagnosis of breast cancer), four alleged mismanagement of the labor and delivery, and the remaining claims had unique descriptions.

D. Additional Claims Study Observations

Other relevant facts gleaned from the 1994-2004 data in the Maine Claims Database include:

- *Claim frequencies* -- Reported claim frequencies per 100 FTE health care providers have leveled off and may be decreasing. However, given reporting and settlement delays, it is too early to conclude whether the decrease will be borne out.
- *Severity* -- Claim severities exhibit a steady and significant upward trend over the past 10 years.
- *Attorney involvement* -- The 10-year average attorney involvement is about 74% of claims. The percentage of attorney involvement is decreasing slightly.
- *Closure* -- The average claim was closed approximately 15 months after it was reported and almost four years after it occurred. This is consistent with other states.

V. Non-Economic Damage Caps

Of 22 actuarial studies [See Appendix 2] that specifically address the impact of non-economic damage caps, the majority reach the same conclusion: caps on non-economic damages will reduce the amount of dollars spent to settle insurance losses. The amount of the reduction varies due to differences in the structure of the cap, the state under review and the assumption of how much of current total losses are attributable to non-economic damages. Studies which compared states with caps to states without caps on key statistics such as cumulative rate increases, premium levels, combined loss ratios, and per physician average payments concluded that caps are effective in reducing costs.

In order to estimate the impact of a cap on non-economic damages in Maine, Pinnacle Actuarial Resources trended the closed claims in the Maine data set by an annual rate of 5%, which was selected after a review of recent rate filings. Losses were trended assuming that the non-economic damage caps would apply on January 1, 2006.

Because Maine data do not contain a split between economic and non-economic damages, Texas' closed claim information was examined. In Texas, approximately 65% of the total claim amount is due to non-economic damages for claims between \$250,000 and \$2 million. For claims greater than \$2 million the non-economic portion of the claim was 50%. Additional data sources, such as the Florida Closed Claim database and industry studies, indicate that non-economic damages range from 50% to nearly 70% of the total claim amount. In order to estimate a range of impacts, a range of splits from 50% to 65% was applied.

At a \$250,000 cap level, the estimated reduction in losses and defense-related expenses is 15%-22%. Table 2 shows the summary calculation assuming that non-economic damages exhibit a similar split as in the Texas data, i.e., 65% for claims \$250,000 - \$2 million and 50% for claims over \$2 million.

Table 2: Impact of \$250,000 Cap on Non-Economic Damages

	(1)	(2)	(3)	(4)	(5)	(6)
		% Losses	(1) x (2)		%	(4) x (5)
Size of Claim by	% of Projected	Eliminated	Impact on	% of Projected	Losses & ALAE	Impact on
Loss Only	Losses in	by	Loss	Loss & ALAE	by	Loss & ALAE
	Layer	\$250,000 Cap	\$250,000 Cap	in Layer	\$250,000 Cap	\$250,000 Cap
0	0.00%	-	0.00%	11.28%	0.00%	0.00%
1 - 250,000	15.89%	0.00%	0.00%	18.24%	0.00%	0.00%
250,001 - 350,000	6.65%	0.00%	0.00%	6.05%	0.00%	0.00%
350,001 - 500,000	8.43%	7.03%	0.59%	7.41%	6.24%	0.46%
500,001 - \$1 million	24.21%	29.94%	7.25%	20.42%	27.69%	5.66%
1,000,001 - \$2 million	27.22%	47.31%	12.88%	22.44%	44.76%	10.05%
Greater than \$2 million	17.59%	41.36%	7.28%	14.14%	40.13%	5.68%
Totals			28.00%			21.84%

Using the same range of assumptions, the estimated reduction in overall loss and Defense and Cost Containment (DACC) expenses for a non-economic damage cap of \$350,000 is 12% - 17%; for a \$500,000 cap the estimated reduction is 8% - 12%.

Studies have shown that the structure of the cap plays a key role in the estimated effect. The effect is larger for smaller dollar caps, caps that are on a per-occurrence rather than per-defendant basis and caps that are not adjusted for inflation.

The extent to which these estimated cost reductions will be realized depends on a number of issues.

- The cost reductions do not reflect the potential impact of judicial challenges of such a cap which could delay or reduce potential savings.
- There is a potential for certain non-economic damages to migrate to economic damages. For example, damages paid to the family of a deceased mother who had no outside income can be broadly awarded as pain and suffering. If caps are put in place, the costs of the services that can be replaced may be more fully itemized and listed as economic damages.

VI. Physician Apology (“I’m Sorry”) Laws

Physician apology laws permit a medical provider to communicate with patients without those statements being admissible as evidence of liability. A number of states have considered and passed legislation in the last two years, as shown in the chart below:

- A number of states allow an expression of regret and sympathy, e.g., “I’m sorry” or “I’m sorry you’re hurt.” These statements are non-incriminating and do not constitute admissions of fault.
- Only Colorado allows an expression of sympathy and an admission of fault, e.g., “I’m sorry and I’m sorry that I hurt you.”

Although some states have had physician apology laws for several years, there is no known direct measure of their effectiveness in reducing overall medical malpractice losses or premiums.

Table 3: Physician Apology/"I'm Sorry" Legislation

State	Year Enacted	Bill	Description
California	2001		Excludes expressions of sympathy after accidents as proof of liability.
Colorado	2003	HB 1232	When medical errors occur, medical providers can apologize to the patient including not just words of sympathy but a full admission of fault, and that apology can not be used against them in a medical malpractice action.
Florida	2001		Excludes expressions of sympathy after accidents as proof of liability.
Illinois	2004*	HB 4847	<i>*Currently under consideration: not yet passed</i> . Allows physicians to express any grief, apology, or otherwise say "I'm sorry" for adverse outcomes without that statement being used against them if the apology is given within 72 hours of when the provider knew or should have known of the potential cause of the outcome.
Massachusetts	1986		Excludes expressions of sympathy after accidents as proof of liability.
Michigan	2004	HB 5311	Under the bill, an expression of sympathy or compassion would not be admissible in court and could not be considered as evidence of liability in a medical malpractice suit. Not as expansive as Colorado bill - specifically excludes application to admissions of fault.
North Carolina	2004	HB 669	Statements made by a health care provider in apologizing for an adverse outcome in medical treatment, offering to undertake corrective or remedial treatment or actions, and gratuitous acts to assist affected persons will not be admissible to prove negligence
Ohio	2004	HB 215	Prohibits the use of a healthcare worker's expression of sympathy as evidence of an admission of liability in a medical malpractice lawsuit. Modeled after Colorado's law.
Oklahoma	2004	HB 2661	"I'm sorry" rule would allow a health care provider to utter an expression of sympathy without it being used against the provider in court
Oregon	2003	HB 3361	any expression of regret or apology made by or on behalf of the person...does not constitute an admission of liability for any purpose.
Tennessee	2003		Excludes expressions of sympathy after accidents as proof of liability.
Texas	1999		Excludes expressions of sympathy after accidents as proof of liability.
Washington	2004	SB 6645	Any statement of apology regarding an adverse outcome is not discoverable or admissible in any civil action.
Wyoming	2004	HB 1004 / SB 1004	"I'm Sorry" law allowing providers to express sympathy and compassion and not have those statements used against them in a liability lawsuit

A number of independent entities have practiced disclosure with reported success. The Lexington (KY) Veterans' Administration (VA) hospital goes one step further than Colorado. In addition to expressions of sympathy and admissions of fault, the VA actively seeks to disclose medical errors and offers direction on how to file a claim. This policy, practiced since the late 1980s, is reported to have reduced lawsuits, settlement costs, and defense costs. Only three cases have gone to trial over the past 17 years, and the average settlement is \$16,000 versus the national VA average of \$98,000. Furthermore, cases are closed in 2 to 4 months instead of the usual two to four year average, saving on defense costs.⁵

John Hopkins formalized a policy in 2001 that encourages physicians to openly disclose errors that harm patients and apologize. A managing attorney for John Hopkins believes the policy reduced expenses on legal claims by 30% in 2003.⁶

COPIC Insurance Company, the largest medical malpractice carrier in Colorado, implemented a program to teach doctors to discuss medical errors, say "I'm sorry" and make the patient whole. In the four years that the program has been in effect, only two patients have sued while in the program.⁷

The hospitals in the University of Michigan Health System have been encouraging doctors to apologize for mistakes since 2002. The system's annual attorney fees have since dropped from \$3 million to \$1 million, and the malpractice lawsuits and notices of intent to sue have fallen from 262 filed in 2001 to about 130 a year.⁸

⁵ "Why Sorry Works! Works – Overview of Sorry Works Programs for the Medical Malpractice Crisis," <http://www.victimsandfamilies.com/Sorry.phtml>

⁶ Zimmerman, Rachel, Associated Press, 5/18/2004, "Doctors new tool to fight lawsuits: Saying I'm Sorry" <http://www.grif.com.au/index.php?id=81>

⁷ Brand, Rachel, Rocky Mountain News, 4/1/2004, "Medical insurance company seeks more disclosure, cut in malpractice lawsuits" http://www.cortezjournal.com/asp-bin/article_generation.asp?article_type=biz&article

⁸ Tanner, Lindsey, Associated Press, 11/12/2004, "Doctors get advice to own up to mistakes."

Several limited studies have used hypothetical scenarios to establish the propensity to sue physicians depending on whether a medical error was disclosed. One study found that full disclosure reduced the reported likelihood of seeking legal advice by over 80%.⁹

The American Medical Association concludes that there is insufficient empirical evidence to support conclusions about the disclosure process.¹⁰ Nevertheless, it is possible to make an estimate of anticipated impacts. Pinnacle Actuarial Resources segregated Maine's closed claim database into claims with a reported loss of \$30,000 or less and those greater than \$30,000. All historical losses were trended at an annual rate of 5%. From the programs described above, "I'm sorry" policies have led to a reduction in legal defense costs of 30%-67%. Applying a 30% – 50% reduction in defense costs for smaller claims translates to a 3.5% - 5.9% savings in total claim costs.

Potential also exists for an increase in benefits to claimants. In Maine, plaintiff's attorneys can receive 33 1/3% of the first \$100,000 of the claim amount as fees. If most claimants with less severe claims could resolve their claims without legal representation, their net payments could increase by this 33 1/3%.

While there was not a great level of knowledge among the stakeholders interviewed about "I'm Sorry" laws, there was unanimous concern expressed for both improved patient safety and greater disclosure between provider and patient. While many parties expressed logistical concerns about patient expectation management and physician apology programs like those of COPIC in Colorado, there seemed to be a real interest in investigating whether such programs could improve the system for all parties. The Maine Hospital Association offered to facilitate surveys of hospital and physician opinions regarding such programs.

⁹ Mazor et al. Health Plan Members' Views about Disclosure of Medical Errors. March 2004. *Annals of Internal Medicine* 2004;140:409-418

¹⁰ Mazor et al. Communicating With Patients About Medical Errors: A Review of the Literature. August 2004. *Arch Intern Med.* 2004; 164:1690-1697

Appendix 1: Data Sources

A. Discussions with Stakeholder Representatives

PL 2003, Ch. 409 required that the study “consult with representatives of the medical community, legal community, and medical malpractice industry.” Pinnacle Actuarial Resources invited representatives from the following organizations to on-site and telephone interviews:

- Consumers for Affordable Healthcare
- Maine Board of Licensure in Medicine (PFR)
- Maine Board of Osteopathic Licensure (PFR)
- Maine Bureau of Health (DHHS)
- Maine Bureau of Medical Services (DHHS)
- Maine Chamber of Commerce
- Maine Health Data Organization
- Maine Hospital Association
- Maine Medical Association
- Maine Osteopathic Association
- Maine Primary Care Association
- Maine Recruitment Center
- Maine Rural Health Association
- Maine State Nurses Association
- Maine Trial Lawyers
- Medical Mutual Insurance Company of Maine
- ProMutual Group.

B. Maine Claims Database

The Maine Health Security Act requires that “Every insurer providing professional liability insurance in this State to a person licensed by the Board of Licensure in Medicine or the Board of Osteopathic Licensure or to any health care

provider shall make a periodic report of claims made under the insurance to the department or board that regulates the insured.” Key fields include:

- Type of Provider (e.g. Hospital, Physician, Other)
- Provider Name and Address
- Provider ISO Class (Specialty)
- Date of Claim Report
- Description of Occurrence
- Date of Occurrence
- Place of Occurrence (unfortunately, this is sometimes the city (e.g. Bangor) and sometimes location (Patient Room, ER, etc.)
- Fatality ID
- Insurance Company
- Date of Disposition
- Co-defendants (if any)
- Reason for Disposition (e.g. Verdict, Settlement, Withdrawn)
- Award Amount (Indemnity)
- Allocated Loss Adjustment Expense Amount.

To analyze claim frequencies, physician exposure data (i.e., the number of physicians either insured or licensed in the state) was obtained from the Maine Department of Health and Human Services’ Office of Data, Research, and Vital Statistics. This data consisted of the number of active physicians by specialty and county of employment.

C. Medical Malpractice Rates and Rate Filings

The *Medical Liability Monitor*, a widely accepted resource on historical rate levels, conducts an annual survey of the leading medical malpractice insurers in all 50 states. Data from several insurers is available in each state for three large physician specialties (internists, general surgeons, and OB/GYNs). Certain caveats about this approach are necessary. First, the rate change history for the leading medical malpractice writers for three specialties are not a precise measure of overall rate changes for the entire

industry. Second, other factors -- including limits and self-insured retentions selected, movement from traditional insurance to self-insurance, and the impact of claims-free credits and experience rating changes -- are not measured in manual rate changes. Finally, some states have experienced a significant number of market exits in the last few years. In some cases, the carriers providing data to the *Medical Liability Monitor* changed from year to year, creating a disconnect. Every effort was made to measure a reasonable estimate of the movement in a state's overall rate levels given the information available.

In addition, information from rate filings in Maine was analyzed, including the most current filing for the Medical Mutual Insurance Company of Maine (MMIC). The filing included mandatory filing forms, an actuarial memorandum and exhibits and other documentation describing and supporting the filing, an estimate of the impact of the filing on program premium levels, and draft versions of the rate manual pages impacted by the filing.

D. Insurance Company Financial Statements

The National Association of Insurance Commissioners (NAIC)'s standardized Annual Statement format is required from all property and casualty insurance companies licensed in the United States. This Statement is supported with extremely detailed accounting rules. The Statement contains: balance sheets, income statements, cash flow detail, premium breakdowns by line and state, reinsurance analysis, investment holdings (as well as sales and acquisitions), expense analyses, and a wide variety of interrogatories related to matters that require additional description and documentation (e.g. accounting rules, asbestos claims liabilities, ownership structures). The NAIC, the A.M. Best Company, and others have developed products that compile the annual statement data. Both the NAIC and A.M. Best Company were consulted in developing analyses of insurance industry statistics and trends. Annual Statement data was reviewed for: loss reserve adequacy, loss frequencies and severities, underwriting expenses, asset distributions, investment income, loss adjustment expenses, and market concentrations of premiums.

E. Bibliography of Relevant Actuarial Studies

Recent actuarial studies of the impact of caps of non-economic damages were located on the websites of actuarial organizations (such as the American Academy of Actuaries and the Casualty Actuarial Society), larger actuarial consulting firms, key medical malpractice liability insurance writers, medical associations and trade groups, and research organizations (such as the RAND Corporation). Twenty-two studies were located that specifically address the impact of non-economic damage caps.

F. State Statutory and Regulatory Provisions

The website of the law firm of McCullough, Campbell & Lane (www.mcandl.com) provided a concise summary of many medical malpractice statutory features by state along with the relevant legal citations. Information on state differences in medical malpractice rate regulation was developed from multiple resources including: state insurance department websites and filing forms, the state filings handbook developed by the Insurance Services Office, Inc. (ISO) and the charts from the *Compendium of State Laws on Insurance Topics* developed by the National Association of Insurance Commissioners (NAIC).

G. Economic and Demographic Data

Two major groups of data were provided by the U.S. Department of Labor, Bureau of Labor Statistics. First, the Occupational Employment Statistics (OES) Survey was used to measure the number of healthcare providers by state as well as their mean annual wage. Per capita income by state was captured to see if broader economic conditions might be correlated to medical malpractice availability and affordability factors; this data was available from the U.S. Bureau of Economic Analysis and Bureau of the Census.

The federal Centers for Medicare & Medicaid Services (CMS) has data on Medicare and Medicaid payments both per capita and as a percentage of total health care costs by state. This provided another factor to assess the possible relationships between

broader state economic factors and medical malpractice insurance availability and affordability. Additional Medicare/Medicaid data was obtained from the *Dartmouth Atlas of Health Care*.

The United Health Foundation's report *America's Health: State Health Rankings* uses an approach that "weights the contributions of various factors, such as smoking, motor vehicle deaths, high school graduation rates, children in poverty, access to care and incidence of preventable disease, to a community's health." The report uses a wide range of data from sources such as the U.S. Departments of Health and Human Services, Commerce, Education and Labor, the National Safety Council and the National Association of State Budget Officers.

Some data used in this report is based on changes in the number of licensed health care providers. Unfortunately, the number of licensed physicians does not serve as a precise measure of the number of physicians due to the impact of doctors that: (1) retained their license and ceased to practice; (2) retained their license and relocated their primary practice within the state or to another state; (3) restricted the type or number of treatments and procedures performed in their practice; or (4) retained their license and move to "part time" work loads. Given these limitations, this data was used to develop statistics that measure relative conditions between states.

H. AMA Medical Malpractice "Crisis" Assessment Map

One commonly referenced resource for identifying the condition of a state's medical malpractice marketplace is the American Medical Association (AMA) crisis assessment map. The map assigns a status of "in crisis," "showing problem signs," or "currently okay," to each state. Maine is identified as a state showing problem signs. A number of factors, both anecdotal and analytical, are included in the AMA's assessment. These factors include both symptoms that have manifested themselves (e.g. changes in coverage availability and affordability, increased large claim frequency) and statutory, regulatory and judicial features that present risk of creating crisis conditions in the future (e.g. lack of medical malpractice reforms including damage caps). Resources reviewed

include: government studies, insurance industry associations and data resources, interviews with medical malpractice insurers, a survey of all 50 states' medical associations, surveys and data from national medical specialty societies, and news reports and analyses of insurance non-renewals, market exits by individual physicians, and closures of individual maternity wards and trauma centers. The map is a valuable insight into the perspective of the health care providers.

Appendix 2: Annotated Bibliography

American Academy of Actuaries Issue Brief, Medical Malpractice Tort Reform: Lessons from the States, 1996 <http://www.actuary.org/pdf/health/medmalp.pdf>

In California following the passage of MICRA (Medical Injury Compensation Reform Act), medical malpractice costs have fallen substantially as a percentage of the U.S. total. In New York -- which enacted a number of reforms but not damage caps -- there was no observable improvement in relative costs. Ohio's cap was overturned in 1985, after which costs rose dramatically and remained high.

Biondi, Richard S., Evaluation of Medical Malpractice Tort Reform, presentation at CAS Spring Meeting, 2004. <http://www.casact.org/coneduc/spring/2004/handouts/biondi.ppt>

The combined impact of a cap on non-economic damages for physicians and hospitals in New York is estimated at 24%, 16%, 12% and 9% of Loss & ALAE (defense costs) for caps of \$250,000, \$500,000, \$750,000 and \$1,000,000, respectively. This assumes physician coverage of \$1.3 million primary and \$1 million excess and unlimited hospital coverage.

For Florida, the combined impact of a cap on non-economic damages for physicians and hospitals is estimated at 20%, 12%, 8% and 6% for caps of \$250,000, \$500,000, \$750,000 and \$1,000,000, respectively. This assumes the current distribution of physician limits and unlimited hospital coverage.

Biondi, Richard S. and Arthur Gurevitch, Non-economic Damage Caps Help Reduce Malpractice Insurance Premiums, Contingencies, November/December 2003, <http://www.contingencies.org/novdec03/evidence.pdf>

Factors that bring down losses, including tort reform, get translated into premium savings regardless of an economic or insurance cycle. Average Loss per Physician from 1992-2002 shows that states with caps are over 50% lower than states without caps; this difference has increased over the experience period. Aggregate malpractice premium per doctor are 30% lower in states with caps than without; this is also increasing.

Congressional Budget Office, Economic and Issues Brief, Limiting Tort Liability for Medical Malpractice, January 8, 2004 <http://www.cbo.gov/showdoc.cfm?index=4968&sequence=0>

Evidence from the states indicates that premiums are lower when tort liability is restricted.

Dyer, Philip E., Medical Professional Liability in Crisis – The Perfect Storm. Reforms of the Tort System, A Proven Solution, PLUS Journal, March 2004, Volume XVII, No. 3

States in which proven reforms were enacted and upheld are far less impacted by rate increases than other states. California enacted a tort reform package in 1975 with a \$250,000 cap on non-economic damages and a sliding scale limit on attorney contingency fees. California premiums are up 186% over 1976-1999 versus 420% for the entire U.S.

Florida Department of Financial Services, Review of Florida Committee Substitute for Senate Bill 2-D, Calculation of Section 40 “Presumed Factor”, Report by Deloitte, Nov 6, 2003. http://www.fldfs.com/Companies/pdf/OIR_Report_Final_110620031.pdf

Statute:

http://www.flsenate.gov/Statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=Ch0766/SEC118.HTM&Title=->2003->Ch0766->Section%20118

Florida’s statute limits non-economic damages to \$500,000 per claimant regardless of the number of practitioners and \$500,000 per practitioner regardless of the number of plaintiffs, with exceptions for death, permanent vegetative state, other defined catastrophic injury or in cases of “manifest injustice” (\$1 million per doctor). Limits for nonpractitioner defendants are higher (\$750,000/\$1.5 million) and limits for Emergency Services physicians are lower (\$150,000/\$300,000). Estimated savings due to the caps will be 9.1% for Indemnity (Loss) only prior to the adjustment for phase-in. Savings for Loss & ALAE (defense) will be 6.3% and 5.3% before and after the adjustment for phase-in, respectively. The phase-in reflects that injuries occurring before September 15, 2003 are covered by the reform.

Florida Hospital Association, Medical Malpractice Analysis, November 7, 2002, Prepared by Richard S. Biondi, Arthur Gurevitch and David S. Wolfe of Milliman, US.

In Florida approximately 77% of total loss amounts for hospitals are due to non-economic damages. For physicians, the percentage is well above 50%.

General Accounting Office (GAO-03-836), Medical Malpractice – Implications of Rising Premiums on Access to Health Care.

Limited available data indicate that growth in malpractice premiums and claims payments has been slower in states that enacted tort reform laws that include certain caps on non-economic damages.

Grover, Stephen, Medical Malpractice Damage Caps: Impacts of Limiting Noneconomic Damages, ECONorthwest, July 29, 2004.

During the period that Oregon capped non-economic damages (1987-1999) the medical malpractice premiums declined by more than 50%. Since the caps were lifted in 1999, premiums have doubled for most specialties, and the average medical liability payment has grown 90% from \$247,000 to \$470,000.

Hunter, J. Robert and Doroshow, Joanne, Premium Deceit: The Failure of "Tort Reform" to Cut Insurance Prices, Center for Justice and Democracy, 1999, 2002, <http://www.centerjd.org/air/PremiumDeceit.pdf>

A review of insurance rate activity -- in medical malpractice, product liability and general liability -- following the tort reforms enacted in reaction to the liability crisis of the mid-1980s demonstrates that tort reforms do not produce lower insurance costs or rates and that it is the underwriting practices of the insurance industry, not the legal system, which is responsible for gyrations in cost and availability of insurance. Reviewing medical malpractice alone, there appears to be a reduction in loss costs in states that enacted the most stringent tort reforms. However, the results for states with few or moderate reforms were mixed; the study concludes there is no clear evidence that the tort reforms impacted insurance prices.

Kessler, Daniel P. and Mark P. McClellan. Effects of Malpractice Pressures and Liability Reforms on Physician's Perception of Medical Care. <http://www.law.duke.edu/journals/lcp/articles/lcp60dWinter1997p81.htm#H1N5>

Matching data on state liability reforms with the American Medical Association's Socioeconomic Monitoring System (AMA SMS) survey shows four results. First, physicians from states that directly reduce malpractice pressure experience lower growth over time in malpractice claim rates and in real malpractice insurance premiums. Second, physicians report significant declines in their perception of the pressure for defensive medicine due to malpractice pressure. Third, personal experience with the malpractice system determines their perceived importance of defensive medicine. Finally, the impact of an individual physician's claims experience on perceptions is smaller in reforming than non-reforming states.

Milliman USA, Analysis Sees Savings for Professional Medical Malpractice Costs, Examines Large States Using Caps on Non-economic Damages, April 8, 2003, www.milliman.com/press_releases/04_09_03_Milliman_Med_Mal_Study.pdf

This study of 15 large states (defined as more than 10,000 doctors) demonstrates that states with caps on non-economic damages (California, Colorado, Indiana, Massachusetts, Maryland and Michigan) have below-average medical malpractice loss costs for physicians. Conversely, the large states without caps (District of Columbia, Florida, Illinois, Kansas, New Jersey, New York, Ohio, Pennsylvania and Texas) have the highest medical malpractice costs.

Milliman USA, Citizens Allied for Pennsylvania Patients, Projected Effect of Capping Non-Economic Damages On Pennsylvania Physicians, 2003,
www.capppa.org/Milliman%20Report.pdf

A \$250,000 cap on non-economic damages in Pennsylvania is estimated to reduce the combined loss and LAE (defense cost) for physician policies written in 2004 by 18%. The average claim comprises nearly two-thirds non-economic loss.

Milliman USA, Massachusetts Medical Society, Estimated Savings Attributable to Certain Professional Liability Reform Proposals in Massachusetts, 2003,
<http://www.massmed.org/pages/milliman.pdf>

A \$500,000 per occurrence cap on non-economic damages in Massachusetts is estimated to reduce indemnity losses by 18.3%; the savings in total costs (loss and ALAE) is estimated to be 12.7%. This assumes the proportion of non-economic to total loss in Massachusetts is between 50% - 65%.

Pace, Nicholas M. et al., Capping Non-Economic Awards in Medical Malpractice Trials – California Jury Verdicts Under MICRA, 2004 RAND Corporation,
<http://www.rand.org/publications/MG/MG234/>

A review of California medical malpractice trials from 1995–1999 shows high level results as follows:

- About 22% of the trials resulted in a verdict in favor of one or more plaintiffs (compared with 53% for all other types of trials).
- The cap on non-economic awards was imposed in 45% of the cases won by plaintiffs.
- Verdicts in death cases were capped more often (58%) than those in non-fatal injury trials (41%).
- Awards in the original verdicts of the sample totaled \$421 million, but with MICRA, the final judgments in those cases dropped to \$295 million, a reduction in the overall liabilities of the defendants of 30%.
- In death cases, defendants' liabilities were reduced by 51%, compared with a 25% reduction in non-fatal injury claims.
- In the absence of MICRA the plaintiffs would have received estimated net recoveries of about \$280 million; with MICRA net recoveries were reduced by 15% overall (9% in injury cases and 44% in death cases.)
- Because of the law's combination of award caps and limits on maximum contingency percentages, attorneys lost 60% of the fees they would have made from these plaintiff victories without MICRA.

Pennsylvania Medical Society Health Research Services Institute, Stephen Foreman, Ph.D., J.D., [Premium] Deceit: A Critique of a Center For Justice & Democracy Study By J. Robert Hunter and Joanne Doroshow, January 8, 2003.

http://www.pamedsoc.org/Content/NavigationMenu/Issues_and_Advocacy/Health_Research_Institute/Critique_JD_Study.pdf

Liability insurance reform leads to lower premium increases and remarkably lower loss cost increases. States with six major medical professional liability reforms saw a 91% increase in loss costs 1985-1998. States with only one reform had an increase of 252%.

Pinnacle Actuarial Resources, Final Report on the Feasibility of an Ohio Patient Compensation Fund, May 1, 2003. www.ohioinsurance.gov/Documents/05-01-03FinalReport.pdf

Ohio's Senate Bill 281 (SB 281) limits non-economic damages to the greater of \$250,000 or three times economic damages, subject to a maximum of \$350,000 per plaintiff and \$500,000 per occurrence. The maximums are raised to \$500,000 and \$1 million for more severe injuries. These caps are estimated to reduce claim costs by 16%. A \$250,000 cap would reduce claim costs by 20%.

Thorpe, Kenneth E. The Medical Malpractice 'Crisis': Recent Trends and the Impact of Tort Reforms, 2004 Project HOPE – The People-to-People Health Foundation, Inc. <http://content.healthaffairs.org/cgi/content/abstract/hlthaff.w4.20v1>

Rising premiums are traced largely to increases in claim severity. Severity has doubled in real terms from 1990 to 2001 and frequency has increased from 1.5 claims per 100 physicians to 15 per 100 from 1956 to 1990, respectively. Since then, frequency has been flat nationally; however, states with caps on non-economic damages but no process for discouraging claims frequency (such as a certificate of merit) have seen increased frequency (e.g., Louisiana). Premium per physician in states that cap awards are 13% lower than in states that do not cap while loss ratios are 12% lower.

Tillinghast-Towers Perrin, New Jersey Malpractice Analysis, March 18, 2003, <http://www.msnj.org/pdfs/NJMalpracticeAnalysis.pdf>

Caps at relatively low levels can have the effect of lowering losses.

Weiss, Martin D. Ph.D., Melissa Gannon and Stephanie Eakins, Weiss Ratings Inc., Medical Malpractice Caps, – The Impact of Non-economic Caps on Physician Premiums, Claims Payout Levels, and Availability of Coverage, June 2, 2003, Rev. June 3, 2003 <http://www.weissratings.com/malpractice.asp>

Insurers have benefited from a slowdown in losses in cap states (84% versus 128% in no-cap states) that has not led to a slowdown in premium growth relative to the no-cap states. Therefore, other more powerful forces should be addressed.

Wellington, Betsy, Medical Malpractice After the Bubble, Presentation at Casualty Actuaries in Reinsurance Annual Meeting, 2004,
[http://www.casact.org/coneduc/reinsure/2004/handouts/551,13,What Happened in CO in 2002?](http://www.casact.org/coneduc/reinsure/2004/handouts/551,13,What%20Happened%20in%20CO%20in%202002?)

In Colorado, the number of payments greater than \$250,000 increased by 50%, versus the long-term average, in the 2 years immediately following a case which held that the cap did not apply to disfigurement. In Michigan, at least a 20% drop in paid indemnity claims per one million residents occurred after caps on non-economic damages were adopted in 1996.

Wyoming Health Care Commission, Projected Effect of Capping Non-Economic Damages On Pennsylvania Physicians, October 13, 2004, Prepared by Richard Biondi, Richard Lord and Sharon Zuch of Milliman USA.
[http://www.wyominghealthcarecommission.org/pdfs/2004_1013_Non Economic Damages_Rpt.pdf](http://www.wyominghealthcarecommission.org/pdfs/2004_1013_Non_Economic_Damages_Rpt.pdf)

A \$250,000 per occurrence cap on non-economic damages in Wyoming is estimated to correspond to a 15% reduction in the combined loss and ALAE (defense cost) for physician claims made policies written in 2005 at a \$1 million per occurrence policy limit. The reduction would be 11%, 7% and 2% for limits of \$350,000, \$500,000 and \$1,000,000, respectively.

Appendix 3: Glossary

Accident Year – A method of organizing insurance loss and loss adjustment expense data according to the year in which the accident or event occurred.

ALAE – Allocated Loss Adjustment Expense, loss adjustment expenses attributable to a specific claim, usually defense costs. A change in accounting definitions recategorized most ALAE into a new category called Defense and Cost Containment Expense (DACC or DCCE).

Calendar Year – A method of organizing insurance loss and loss adjustment expense data according to the year in which the financial transaction (e.g. a loss payment or reserve increase) occurred.

Cap – An amount imposed as a limit on claim damages.

CAS – Casualty Actuarial Society, the organization responsible for educational and research for property and casualty actuaries in the United States.

Causation – The relationship between an act or agency (cause) and the effect it produces.

Claims-Made Coverage – An insurance coverage form that provides reimbursement for claims reported during the coverage period.

Collateral Source – Rules on the admissibility of payments from other sources such as health insurance and life insurance.

Combined Ratio - The sum of the loss and LAE ratio and the underwriting expense ratio.

Comparative Negligence – A tort system based on the concept that only the most responsible party pays the entire cost of an injury.

Contributory Negligence – A tort system based on the concept that each responsible party pays in proportion to their fault.

Correlation Coefficient - a statistic between -1 and 1 that measures the degree to which two factors are linearly related.

DACC – Defense and Cost Containment, loss adjustment expenses specifically attributable to the defense of a claim or cost containment procedures. Also called DCCE.

Earned Premium – The portion of an insurance policy's premium for which the coverage has been provided.

Economic Damages – Loss payments to the claimant recognizing actual expenses incurred to remedy an injury; including medical expenses and loss of income.

Experience Rating – A method of adjusting premium derived from manual rates for insured historical loss experience to the extent that it is predictive of future loss results.

Exposure – A relative measure of an insured's exposure to some type of loss. Typically this is number of physicians or occupied beds for malpractice insurance.

Frequency – The number of claims per exposure, such as physicians, or premium.

IBNR – Incurred but not Reported, loss reserves that provided for additional development on known claims and claims that have occurred but have not been reported.

ISO – Insurance Services Office, Inc. An organization that serves as both a licensed statistical agent and rating organization for the insurance industry for most major lines of insurance, except workers compensation.

Joint Liability – A tort system concept whereby all defendants contribute proportionately to the judgment.

JUA - Joint Underwriting Association, a government insurance-type program that often serves to insure risks not able to procure coverage from insurance companies.

LAE – Loss Adjustment Expenses, insurance company expenses associated with settling claims. LAE includes both unallocated loss adjustment expenses (ULAE, which is now known as Adjusting and Other Expense, AOE) and allocated loss adjustment expenses (ALAE) which is now known as DACC.

Loss Ratio – The ratio of some measure of losses (typically paid or incurred) to some measure of premium.

Manual Rate – The cost of insurance per exposure, as defined by an insurance company in their product manuals. Manual rates times exposures are “manual premiums.”

MICRA – Medical Insurance Comprehensive Reform Act, a comprehensive reform of the medical malpractice statutory system in California enacted in 1975. Reforms included caps on non-economic damages, attorney fees, and arbitration rules.

NAIC – National Association of Insurance Commissioners, a national organization of state officials charged with the regulation of insurance.

Net Operating Ratio – The combined ratio less investment income from insurance operations as a percentage premium.

Non-Economic Damages – Loss payments to the claimant recognizing costs not related to the cost of remedying an injury; including pain and suffering and loss of consortium and excluding punitive damages.

Occurrence Coverage – An insurance coverage form that provides reimbursement for claims occurring during the coverage period.

Prior Approval – A method of rate regulation requiring that the state regulator give their affirmative approval of a proposed rate filing before it can be implemented.

Punitive Damages – Damages awarded in a lawsuit to penalize a defendant for willful and wanton conduct.

Rating Organization – An organization responsible for collecting and analyzing insurance industry loss experience and producing benchmark loss costs and rating relativities.

Reinsurance – A mechanism by which an insurance company can transfer some of their insurance risk to another insurer.

Report Year – A method of organizing insurance loss and loss adjustment expense data according to the year in which the accident or event was reported to the insurer, regardless of when it occurred.

Self-Insurance – A method of risk financing whereby the insured retains a fixed amount (see self-insured retention) on either a per claim or aggregate basis.

Self-Insured Retentions - a fixed amount retained by an insured on either a per claim or aggregate basis.

Several Liability – A tort system concept whereby each defendant is potentially responsible for the entire judgment.

Severity – The average cost or payment amount of a claim.

Statistical Agent – An organization responsible for collecting insurance industry statistical data and summarizing it for state regulators.

Subrogation – A right of the insurer to recover from a third party.

Underwriting Cycle - periodic, cyclical fluctuations in insurance industry operating results and the corresponding cycles of rate movements to return operating results to longer term averages.

